THE EFFICACY OF CHANGES IN THE DISCOUNT RATES OF THE FEDERAL RESERVE BANKS

The recent controversial and critical discussion of the discount policies of central banking systems both in the United States and in Europe has frequently resulted in confusing rather than in clarifying public opinion upon a subject of vital importance to all classes of society. This situation is not due to a lack of thoughtful and well-supported arguments designed to maintain particular theses as to what central banking systems can or ought to do in given emergencies. The confusion arises largely because the advocates of opposing views are apt to base their respective cases upon quite different presuppositions, in consequence of which they fail to join issue squarely with their opponents. For example, the question whether a central bank ought to attempt to restrict credit or to encourage its expansion by changes in its discount rates is one that offers opportunity for debate, if it be taken for granted that such changes in discount rates afford an effective weapon of credit control. But this reservation is itself a highly debatable point. In other words, the question of the desirability of a given policy must be sharply differentiated from the discussion of the efficacy of that policy. Men who agree as to the desirability of checking or of encouraging credit expansion under given conditions, may yet hold opposed views as to the efficacy of the means chosen to bring about the desired result. Failure to make this distinction has led to obscurity in discussion and to much talking at cross purposes. Even if the question at issue concerns only the desirability of credit control, on the assumption that this control is possible, the different angles of approach to the subject augment the opportunities for contradictory expressions of opinion. The topic may be treated simply from the standpoint of the general social expediency of permitting a central bank to exert a wide measure of control over trade and industry through its control of credit accommodation. Or the treatment may be purely temporal—*i.e.*, confined to a discussion of whether the time is opportune for introducing a change in policy by raising or lowering rates as the case may be. The differences of opinion that arise in the last-named instance are usually due to divergent views as to the stability of the current business situation and the probable developments of the immediate future. At any given moment, one man may believe that the existing business and industrial situation has reached a degree of expansion where stability is jeopardized and rates should be advanced as a means of forcing a reduction in the scale of business operations. Another man may fail to see any such elements of unsoundness in the business structure and oppose all changes. Contrariwise, similar dis-

agreements arise concerning the timeliness of rate reductions. It is furthermore obvious that a man who on one occasion is an eager advocate of higher rates as a means of credit contraction may at another time be an equally ardent and at the same time consistent champion of lower rates. For example, some of those writers who are at present enthusiastic spokesmen for rate reductions were less than a year ago the most forcible advocates of advances.

To repeat: the discount policy of central banks may be discussed either from the point of view of actual efficacy, or conceding that, of general expediency and temporal wisdom. Possibly special mention ought to be made also of the controversial differences that are traceable to the existence of wartime inflation. Many European financiers who would have no doubts either as to the efficacy or the desirability of changes in central bank rates as a means of credit control under the nicely adjusted conditions of prewar times have considered rate changes impotent in countries where the necessities of government finance were a controlling factor and were responsible for a continuous inflation of currency and credit. A year ago, when discussion was most active concerning the best means to curb inflation, European students took sharp issue with one another as to the means to be employed, even when they were in harmony concerning the ends to be achieved. The effective opponents (scientifically speaking) of advances in central bank rates of discount were usually as hostile to the idea of further credit inflation as were the spokesmen for higher rates. Indeed, their remedy for inflation was more drastic and, they believed, better adapted to the end in view. The exponents of this point of view are very fairly represented by Vissering who in his address before the Brussels conference said: "A contraction of this money [depreciated fiduciary money] outstanding by the old method of raising the bank rate will have no effect, because this abundance of money was not caused by giving too much credit on easy terms or by speculation, which must be curbed; for even if in some countries the granting of credit and speculation apparently revived to some extent during a short period, this was insignificant when compared to the very considerable volume of the created currency. Moreover the amount of created currency is too large for contraction to be feasible by such simple means."

"Two methods of doing this are fairly obvious, but their effect will only be felt in the long run. The first is the amortization of government and municipal debt, and the other is the rationing of credit under the guidance of the bank of issue."[1]

Similarly McKenna, in an address to the stockholders of the London

[1] International Financial Conference. Verbatim Record of the Debates. Brussels 1920), vol. II, pp. 53-54.

Joint City and Midland, on January 28, 1921 said: "Monetary inflation, unlike speculative inflation, is not a temporary condition capable of remedy by raising the Bank rate and restricting credit. . . . If permanent monetary deflation is to be accomplished it can only be by a reduction of the purchasing power brought into existence by the great war loans, a reduction which can only be effected by paying off part of the national debt." *The London Economist* also over a period of months published editorials and special letters intended to point out that advances in discount rates could only penalize industry and could not correct deflation so long as the government made no provision for funding its floating debt.

The evidence available shows, therefore, that there were strong opponents of the high rate policy who were not inflationists—at least that was true for Europe. In this country, some critics have rather uncritically assumed that advocates of a low rate policy for central banks were desirous of encouraging inflation; while on the other hand, the adherents of the low rate policy have often taken it for granted that the protagonists of high rates were bent upon bringing about immediate drastic deflation. As a matter of fact the numbers and, unfortunately, the political power of those who have consistently advocated low discount rates as a means of obtaining "cheap money" to the end of prolonging good times, are probably great. But scientifically speaking, they can be ignored and placed in the same category as those persons who thought interest rates could be manipulated, to the end of securing an immediate return to "normal" or prewar conditions.

On the whole, trained opinion in this country would seem, judging from published statements, to harbor a belief in the potency of the discount rates of the federal reserve banks, as an instrument of credit control. For example, both Sprague and Moulton concede the efficacy of rate changes, as if the proposition required no demonstration, although the force of the concession is considerably weakened by expressions of opinion found elsewhere in their writings.[2] In Sprague's article in the AMERICAN ECONOMIC REVIEW for March, 1921, on "The Discount Policy of the Federal Reserve Banks" (p. 24), it is stated that "the discount rate of the reserve banks is clearly an effective means of checking credit expansion, but it is also evident that advancing rates influence the situation rather slowly." And Moulton says in the AMERICAN ECONOMIC REVIEW (Supplement, March 1920, p. 170), that "a raising of the rate of discount at the federal reserve banks tends to increase the discount rates on all loans by member banks."

[2] *Cf.* Sprague, AMERICAN ECONOMIC REVIEW, Mar., 1921, p. 27, and H. G. Moulton, *Banking Policy and the Price Situation,* AM. ECON. REVIEW, Supplement, Mar., 1920, note 22, p. 175.

Since the above excerpts appear to reflect with fair accuracy the general attitude (at least until quite recently when a considerable body of contrary opinion has developed), it follows that the major part of the discussion as to rate policy in this country has been devoted to considering the desirability and timeliness of attempts to control the credit situation.

The Federal Reserve Board appears to have adopted the prevailing belief and to have conceded that the discount rates of the reserve banks influence market rates and thereby have a controlling effect upon the amount of bank credit outstanding. It must be confessed that if one cared to dispute this statement, there are published expressions of opinion that would give support to the opposition. But it is probably safe to say that the influence of the discount rates of the reserve banks has been affirmed more often than it has been denied. In a letter made public by the Board June 10, 1919, addressed to all federal reserve agents the influence of central bank rates in controlling not only the amount of credit granted but the character of that credit is assumed, as if it were a commonplace statement of fact. The letter says in part: "The Federal Reserve Board is concerned over the existing tendency towards excessive speculation, and while ordinarily this could be corrected by an advance in discount rates at the federal reserve banks, it is not practicable to apply this check at this time because of government financing."

The following spring, in several incidental references in the *Federal Reserve Bulletin*, credit control through rate fixation is apparently taken for granted as witness the following in the Bulletin for March, 1920 (p. 214): "The improvement which has taken place in our own finances opens the way to a more effective use of the rediscount rate as a means of credit regulation." And later, in July 1920, on page 665 of the Bulletin is the following: "The question constantly asked within the past few months has been the relationship noted between control of credit, the application of higher discount rates, and the actual expansion of operations. . . . The general conclusion to be drawn is unmistakably to the effect that the operation of credit control through higher discount rates has had a marked success." A good deal of testimony is then brought forward to show that since the first of the year successive rate advances have halted the pace of credit expansion despite the heavy actual increases in earning assets. The real question is held to be whether the increase would not have been greater but for the application of this method. By the fall of 1920, however, the Board was more concerned to prove that it had been liberal in its extensions of credit to agriculture and other "legitimate" interests, and to show that, as it put it in the Bulletin for September 1920 (p. 904), "Indis-

criminate liquidation of credits has not been the object of the recent policy of the federal reserve system. The primary concern of the Federal Reserve Board now, as always, has been to make sure that the essential credit needs of American industry are being met." It is interesting to set this off against an expression of opinion found in the Bulletin for October 1919 (p. 911) which says: "There is no ready method in reserve banking by which the use of reserve facilities can be withheld from use in undesirable lines of activity without, also, being withheld from use in desirable lines." The catholicity of the opinions expressed above is further enhanced by occasional remarks casting doubt upon the possibility of changes in discount rates having any potency at all as a means of credit control.[3]

It is evident that the support of official authority cannot be invoked by either side to a controversy when the quoted official opinions would, as in this case, neutralize one another. Nor, for that matter can statistics be used either to prove or to disprove the contention that the discount rates of the reserve banks have been the primary factors in credit control, when as is the case here, the same statistical data can be used both by the affirmative and by the negative sides. Statistical demonstration is inconclusive because the forces working to create or destroy a given volume of credit are too multifarious and complex in their workings to permit the study of the effects of any one factor working in isolation. In brief, one is dealing here with matters of opinion which may be upheld by *a priori* reasoning but can at best receive only negative support from an examination of the facts.

To return for a moment to the argument that advances in discount rates by central banks are a more or less automatic device for enforcing discrimination in the types of loans granted, it should be said that this belief has been more or less widely held and positively expressed in Europe as well as in the United States. Gustav Cassel who has lately been urging rate reductions, put the argument for high rates most trenchantly in his "Memorandum on the World's Monetary Problems" prepared for the International Financial Conference held at Brussels last year. He says, on page 22: "An interest policy which gives the scarcity of capital its true expression in a sufficiently high rate of interest can in no way prevent the productive powers of the community from being fully employed. It only directs these powers to a certain extent from future needs to present, and in this way, it secures a better provision for the present than would otherwise be possible." And on page 23: "Besides the rate of interest, there are other means for enforcing the necessary restriction on the demand for capital. The banks always discriminate between the proposals for which their ac-

[3] *Cf. Federal Reserve Bulletin*, Oct., 1919, p. 911. *Ibid.*, January, 1921, p. 6.

commodation is sought, and in periods of particular scarcity of capital, it is only natural that this discrimination is made more severe than usual. . . . If the rate of interest is kept so high as to correspond to the real scarcity of capital, there will be no need for a further restriction of the demand on bureaucratic lines."

As a matter of fact, the attacks of opponents of a high rate policy were directed with especial cogency against the contention that high rates made for the most effective and economically desirable distribution of credit. Why, they asked, should high rates of interest on bank loans deter undesirable borrowers such as speculators, or producers and purveyors of socially deleterious and extravagantly wasteful articles from continuing to borrow? Just such classes of borrowers, it was contended, would be least likely to feel the pressure of high rates. In any case, there was no reason to suppose that the selective elimination forced by high rates would exclude just these classes of borrowers and no one else. When exorbitant speculative profits were in anticipation, as during the period of rising prices, what reason would the speculator have to curtail his operations because interest charges had advanced 1, 2 or 3, etc. per cent? In answer to this it was alleged that high rates do bear more heavily upon the speculator in commodities than upon the producer or the manufacturer, since the latter have many expenses connected with operations, whereas the chief costs for the speculator are the interest charges on borrowed capital. As a matter of fact, in the absence of comprehensive data concerning the proportionate burden of interest charges for various groups, one man's opinion is no better than that of another. And to attempt to distinguish illegitimate speculative activity from other types of business operation is, as has been frequently pointed out, an impossible task.

The arguments of those who see in discount rate fixation merely a particular aspect of the price problem—namely, the price of the commodity called bank funds, fluid capital, etc.—appear to the writer to be essentially fallacious. The case for higher discount rates, for example, has sometimes been expounded as follows: Under competition, high prices of competitively produced goods are socially desirable because at a time of scarcity, they will induce economy and lead, via increased profits, to the creation of greater supplies. Similarly, high rates on bank loans will conserve existing capital supplies and evoke fresh ones. To this it may be replied, that so far as the United States is concerned variations in domestic rates may cause a shift of lending from one community to another, but otherwise there is nothing in high rates to evoke more "bank funds," if by that is meant cash resources. Receipts of gold from abroad do not at present have any connection with changes in market rates and to the extent that they occur may

defeat the very purpose of the high rates which are intended to restrict the amount of credit granted. One is not dealing with some intangible elusive capital supply that can be evoked or dissipated by means of price manipulations. The banking system is built not on "funds" but on claims to goods and property and what is bought by the borrower is the services of the bank in facilitating transfers of goods, enabling the borrower to get possession of goods and, if necessary, providing actual cash to enable him to do it. There may be formal, legal, or customary limitations placed upon the extent to which banks can dispose of their services, but in the United States at any rate the limitation is found in a reserve which the bank can create by borrowing in its turn. What is the rate except the expression of a greater or less inclination on the part of the bank to sell its services?

So as far as the demand is concerned, it is true that considerations of expense attached to borrowing may restrict demand, although in a very active boom period it is highly probable that the marginal borrower would pay more if he had to do so and that many borrowers would be willing to expand their loans if they could at existing rates. This probability shows that the rates fixed are not determined on a severely competitive basis. If they were, they would be higher at such times. On the other hand, when opportunities for business profit are reduced, the banks will charge less for their services but it does not follow that the utilization of credit will be thereby greatly stimulated.

Irrespective of the relationship existing between rediscount rates and general market rates, it seems that undue emphasis has been put upon the "highness" or "lowness" of actual rates paid by borrowers. The pervasive insistence upon the efficacy of changes in short-time interest rates as an instrument of credit control involves a gross exaggeration of their importance as an element in expenses of production. So long as business prosperity continues and goods move regularly from producer through intermediaries to consumer, their influence is not nearly so great as is imagined in determining the volume of business. To be sure, if goods do not move regularly, the burden of interest charges may be keenly felt, but it will then be felt even if rates are very low. In itemized expense accounts, the interest charge on short-time loans ordinarily appears as an insignificant percentage of the total outlay. After all, the costs of labor and material are the primary expenses, and interest as a payment made to secure control of the means to purchase goods and services must in the nature of the case be a subordinate element. Yet the interest charge always looms large in the mind of the borrower because there is usually a belief, however mistaken, that other outlays are represented by tangible goods and by services whose value are at least equal to the amounts paid to secure

them. Interest, however, appears as an item of expense not offset by these purchases. Provision must be made for it, and if it cannot be met except by trenching upon the usual profits or by incurring actual losses, the failure is apt to be attributed more particularly to the existence of the interest charge. Of course, the reason may be that the demand for salable goods has fallen or the services bought have not been satisfactory, but whatever the cause, the interest charge appearing as an amount in excess of the property offset against the sum borrowed, has imputed to it a disproportionate share of the blame for failure.[4] To be sure, if extensive data were available showing what reliance is placed by different industries and trades and different firms within the same competitive group upon short-time borrowings, the differences would be shown to be profound. This means of course that increases

[4] A few illustrations, taken at random from the very scanty published material accessible, showing itemized production costs for given establishments or groups of establishments, bear out the statements just made. The Federal Trade Commission for example in a report on "Anthracite and Bituminous Coal" (June 20, 1917, pp. 153-157) gave the expenses by months of a large New England wharf yard from April 1915 to December 1916. In the case of an intermediary handling concern of this sort one would expect interest on borrowed funds to be relatively an important item. But during 1916, although total expenses varied from a minimum of $.942 per ton in August to a maximum of $1.389 in November, the interest on accounts payable which amounted to $.004 per ton in January reached $.20 in November, but in no other month exceeded $.043.

The Federal Trade Commission also published in its "Report on the Meat Packing Industry" (Part V, p. 101) a statement of the Cudahy Company which was the only one of the great packers which compiled a classified profit and loss statement. In 1912 total interest amounted to $692,163 out of a total outlay of $90,644,292. In 1917, total outlay had increased somewhat more than 100 per cent to $182,203,286 while interest charges were $1,549,224. In both years therefore the total interest charges amounted to a negligible fraction of a per cent of total outlays.

In the bulletins issued by the Bureau of Business Research at Harvard University giving in detail operating expenses in certain lines of wholesale and retail trade, there are set forth some valuable statistics showing the percentage relationship of total interest charges to net sales. These figures include interest on long and short-time borrowing plus interest estimated on the proprietor's net investment in the business, exclusive of real estate. In 1919 for 155 retail hardware stores, total expenses varied from 11.4 per cent to 36.3 per cent of net sales with 21 per cent common figure, and interest, from 0.95 per cent to 8.95 per cent with 3.3 per cent common. In the retail drug business in 1919, with 185 stores reporting, the range was from 17.7 per cent to 42.9 per cent for total expenses with 27.6 per cent the common figure and from 1.1 per cent to 11.8 per cent for total interest, with 3.1 per cent the common figure. To take one more illustration: 159 wholesale grocers in 1919 had total operating expenses amounting to 4.35 per cent of net sales as a minimum and 14.71 per cent as a maximum with 9.1 per cent the common figure. Total interest ranged from 0.34 per cent to 2.75 per cent, with 1.6 per cent as the common figure.

in rates for short-time loans are felt very unequally by competitors in the same business, given their unequal dependence upon banks. Hence it is true that any pronounced rate changes will in the case of highly competitive businesses exert an effect out of relation to their absolute importance which is very often insignificant.

The arguments set forth above which have been the ones most frequently presented in discussions of rate policy usually take for granted that changes in the discount rates of central banks will have a direct effect upon outside market rates. So far as the United States is concerned, the assumption is a large one, and in the opinion of the writer, an incorrect one. It has been often pointed out that the English prewar banking system differed from the present federal reserve system in many important particulars. There has been nevertheless a hesitancy to accept the inevitable conclusions to be deduced from those differences, and the major part of rate discussion in the United States has therefore been based upon the assumption that the federal reserve system occupied a position of control similar to that held by the Bank of England. Incidentally, it should be remembered that even before the war the Bank of England frequently had difficulty in forcing the market to take cognizance of its rate policy. Its control had been gradually weakening over a long period of years as outside institutions grew in resources and power, and the authority exercised was based upon a voluntary deference to its leading, the outgrowth of custom and of a conviction that its power ought to be maintained. During the war and afterward the Bank had to yield to the exigencies of governmental needs with a resultant loss of control over the general discount market.

In the United States there is at present no customary or legal coercion strong enough to bring outside market rates into line with the official rates of the federal reserve banks and there is nothing in the structure of our banking organization to force such conformity. The federal reserve banks do not serve a highly centralized and highly sensitive international market and if the system continues to function on a regional basis, they never can do so. On the regional basis, each district ought to develop a discount market of its own relatively independent of all others, although to meet temporary needs, funds may flow in or out. If there were not this concept of regional independence, rediscounting among the federal reserve banks would take place freely and as a matter of course. In fact, the banks do not like to rediscount and their managements regard it as duty to try to avoid doing so, except upon occasions when seasonal demands are extraordinarily heavy. There exists in this attitude and in legal intent (else why did not the law establish one central bank?) a hindrance to the unimpeded flow of funds and to the development of one centralized discount market.

Moreover, the federal reserve banks do not deal with a few institutions doing a largely international business, based upon the closest competitive calculations. They do business instead with thousands of small institutions whose interests are wholly or primarily domestic—institutions which serve limited areas and often feel only remotely the influence of competition. The tables published monthly in the *Federal Reserve Bulletin* showing discount and interest rates prevailing in various centres for different classes of paper are an excellent illustration of the lack of a competitive distribution of banking resources adequate to bring about an approach to uniform rates throughout the country. And if rates in small towns and remote communities were taken into account, concepts as to what constituted ruling rates of discount would be severely shaken. These local rates differences undeniably make for a greater claim upon the resources of rediscounting agencies in those sections where rates are highest. The resources of the Second Bank of the United States were diverted toward the South and West where local interest rates were high. Under the federal reserve system, undue sectional demands (*i.e.*, undue in relation to local banking resources) are prevented to the extent that the banks are operated as independent units. If no objection arose to unlimited interbank rediscounting or if lending were undertaken from a single centre, there would probably be much greater utilization of funds by the high interest parts of the country than is now the case. Thereby, however, greater uniformity in interest rates throughout the United States would be more speedily achieved. As it is, there are many factors at work making for the gradual elimination of the extreme variations in local interest rates, such, for example as the activity of commercial paper houses in placing paper throughout the United States and the existence of opportunities to rediscount paper originating in high interest communities at as low and sometimes at lower rates than in low interest sections. Still, differences persist. Many local borrowers are not now and never will be able to offer their paper outside their own communities. Often country bank loans are of a semi-perpetual type and are carried at high rates which the borrower must pay or else go without accommodation. The bank can secure the necessary proportion of liquid assets by the purchase of commercial paper, investment of funds in the call market or through holdings of customers' paper eligible for rediscount. Naturally the utilization of all these avenues of investment tends to make it easier for the local borrower, but so long as he is forced to depend upon a local institution there is no driving force of competition to bring the rate of interest charged him into line with the rates charged elsewhere, even making allowances for risk and character of the loan.

The twelve rediscounting agencies which comprise the Federal Reserve System serve then innumerable small, independent banks, which charge interest rates that sometimes evidence local monopolistic power of the leading agency, more or less restrained by usury laws, generous or severe, rates largely the product of local custom and feeling only remotely the influence of outside competition. Under such circumstances, the problem of credit control cannot be solved by advances of fractional or even full percentages in the rediscount rates of the regional banks? What efficacy has such an advance as applied to a bank, let us say, in some western or southwestern state which customarily lends at 8, 10 or 12 per cent? None at all, if such a bank is pressed for loans, recognizes the profit that lies in rediscounting, and insists upon taking it. The only remedy for this situation is an outright refusal to lend.

It is significant in this connection to read the published summaries of policies actually pursued by several federal reserve bank managements in their attempts to curtail credit applications.[5] The excerpts make it very clear that the officials recognized that there was no substitute for direct action in determining which borrowers should be accommodated and how much they might have. The policy has not been —and could not have been—to serve all comers at fixed rates. There is no intention of denying that the announced policy of the Federal Reserve Board as advertised by rate advances helped to hasten an inevitable credit contraction and served to make its consequences less disastrous than they would otherwise have been. But it is not believed that the changes in discount rates were the directly effective weapons of credit control. Downright refusal to expand certain classes of loans and pressure for repayment of others were the potent factors in credit contraction, and the rate advances were mere outward signs of the initiation of a sterner policy toward member banks. The pressure exerted by the member banks in their turn upon their customers no doubt became more severe as the result of warnings coming from the rediscounting agencies, but the actual advances in rediscount rates would not have had any material effect if they had not been accompanied by vigorous action.

This belief in the ineffectiveness of the changes in the official rates finds further support in the fact that the discount rates of the reserve banks, and notably those of the Federal Reserve Bank of New York, have not only been maintained below the current market rates but the upward and downward movements have tardily followed instead of pre-

[5] *Cf. Federal Reserve Bulletin,* Feb., 1920, pp. 116-117.

ceding changes in the outside market rates.[6] In the Bulletin for September, 1920 (p. 942), appears this statement: "Average rates of discount charged by the Federal Reserve Bank of New York on all discounts were about 1½ per cent below the market rate until November 1919 when the Federal Reserve Board and the federal reserve banks embarked upon the policy of raising discount rates. After that date the spread between the market rates and the federal reserve rate decreased rapidly and in March and April was about ½ per cent. Since then commercial rates have increased more rapidly than the federal reserve rate, although the margin narrowed somewhat when the federal reserve bank (*i.e.*, New York) raised its rate on commercial paper to 7 per cent in May." Similarly the rate reductions recently made were preceded by reductions in outside market rates. Indeed the discount rates of the Federal Reserve Bank of New York seem to have been merely a somewhat diminished reflection of what market rates have actually become. The fact that the spread between the reserve bank rates and the outside rates in the New York market has also varied, shows that changes in outside rates are governed by an independent set of causes.

A frequent answer to the question as to whether reserve bank rates have any control over the market is that they have a sentimental effect, even if they bear no very definite relation to outside market rates: *i.e.*, advances indicate a need for caution, while reductions are a signal that restriction of credit need not be so rigid. Sentimental control, however, has just this disadvantage: the sentiments are heeded if they happen to mirror the opinions and coincide with the particularistic interests of those whom it is intended to reach. The warning is often ignored unless it is backed by a weapon that can enforce control. Certainly the discount rates of the federal reserve banks cannot be employed as such a weapon until they are maintained at a level as compared with outside market rates which will penalize rediscounting, instead of, as in many cases, putting a positive premium upon it. This is admittedly difficult to do immediately when many banks have so expanded their investments that they are hopelessly dependent upon the support afforded by rediscounts. But once the abnormal reliance upon the reserve banks growing out of the war and the post-war boom is past, steps should be taken to prevent the continuous use of the resources of the federal reserve system as an addition to the capital and surplus of member banks. In any case, the effective utilization of discount rates will be hampered by the factors already mentioned: the

6 January 23, 1920, when the New York Reserve Bank rate for commercial paper advanced to 6 per cent the open market rate had already been 6 per cent for some weeks. When on June 1, the reserve rate went to 7 per cent commercial paper had been 7½ per cent for 2 weeks and 7 per cent for a month.

extraordinarily high rates of remote centers and, at intervals, of the call loan market. Under certain circumstances, no practicable advances in discount rates may suffice to control expansion and it may become necessary to enforce reasonable regulations regarding usury or to refuse rediscounts to a bank that lends at extortionate rates.

Certainly warnings issued by the Federal Reserve Board against using the privilege of rediscounting as a source of profit will not always be heeded if rediscount rates are favorable and positive refusals are not encountered. It is well known that country banks have frequently bought commercial paper at attractive rates instead of using surplus funds to reduce their borrowings, because it paid. Apparently there was no sentiment against the practice and it could hardly be expected that there would be. No doubt some banks have pursued a conscious policy of abstention from rediscounting believing that their operations should be kept within the limits of their own resources. A study made by the writer of changes in the loans and discount and in the rediscounts and bills payable of eleven of the large banks of New York City in 1918-1919 brought out very clearly that some institutions had expanded their scale of operations without reference to their ability to carry their investments; and it was also clear that the explanation was not to be found in their increased investments in United States securities, although that afforded a partial explanation. On the other hand, a few banks had regarded the right to rediscount as a privilege to be used in an emergency and had only resorted to it reluctantly toward the end of 1919 on any considerable scale. It is true that there still remain banks which have taken little or no advantage of the rediscounting privilege. When pressure for loans was great and profit lay in rediscounting, it is not easy to see why the smaller institutions held back except through ignorance or timidity. Certainly there was not until recently any force of public opinion to prevent rediscounting—rather the contrary. Indeed, one of the extraordinary developments of war-time finance has been the matter-of-course assumption that rediscounting ought normally to yield a profit to the borrowing bank.

Another fact should be kept in mind in considering the incentives making for rediscounts. Since member banks have to maintain required reserves with the federal reserve banks, they are disposed to reduce the expense thereby entailed to a minimum. That often means that they will keep their reserves at such a low point that any unexpected or unusually heavy withdrawals will necessitate an application for rediscounts. This disposition was particularly noticeable in following the daily reserve statements of certain of the eleven banks to which reference has been made. If rediscount rates were above outside lending rates, this attitude toward the reserve requirement would

be altered because penalties would attach to the failure to make adequate provision.

Now that the outside market rates have fallen and the pressure for loans by member banks has been relaxed, an opportunity has been afforded of keeping discount rates of the reserve banks at levels where with reviving business they would have offered little incentive to expansion for the sake of expansion. Judged from that point of view, it seems unfortunate that rates have been reduced so that they continue to be below the outside rates in the chief money market centers. On this account (not because it is believed that the lower rediscount rates will just at present lead to resumption of credit expansion) the downward movement appears unfortunate.

When the discount rates of the federal reserve banks lead the market rates in the chief money centers, when liquidation on the part of borrowing banks has been largely consummated and the system becomes, as it was intended, a source of reliance for recurrent seasonal, or other extraordinary needs, the reserve banks ought to be in a position to exercise a measure of control over outside market rates. Even so, the effectiveness of such control will be dependent upon the creation of a broad discount market of a genuinely competitive sort, sensitive to the influence of rate changes. So far such a market has been lacking and it remains to be seen whether the surplus funds of the federal reserve banks, once released from the abnormally heavy demands which have engrossed them, can be successfully utilized in the development of a genuine open market. So far open market operations have been confined to purchases of acceptances at artificially low rates, and it must be confessed that the future for an open market based primarily upon acceptances is not over-promising. England is essentially furthering her domestic business in discounting bankers' acceptances to a greater extent than would be true in the United States. Why should our central banks confine their open market purchases to a type of paper that represents a relatively small proportion of general banking business? Even with the preferential buying rate which acts more or less as a subsidy to dealers in acceptances, the market has not developed according to expectations. The *Acceptance Bulletin* of May 1921 gives the result of a nation-wide inquiry into acceptance conditions. The results of a quite comprehensive survey showed that on April 1, $664,092,000 of bankers acceptances were outstanding, a decline of 18 per cent from the preceding year. A significant statement is appended to this effect: "Inquiry among international bankers discloses that two items represent a large proportion of the acceptances now outstanding; namely, credits covering sugar and those granted for the creation of dollar exchange." Conceding that the acceptance market has been de-

veloped under trying conditions, it still remains true that the outlook for economic stability in international relations within the next few years is not good. It would seem highly dubious therefore to build up by artificial means an open market confined to bills originating chiefly in export and import transactions. Morever, as the English rates on acceptances have to be met, if financing is to be done in this market, the outside market is likely to be a highly uncertain one. Advances in rates on other types of paper may well make acceptances unsalable, and if the market is not to be destroyed, the federal reserve banks will have to come to the rescue of the dealers without any reference to their own investment needs and, it may be, at a time when it seems desirable to curtail general credit. From the point of view of the solidity and security of our banking system, it would not appear wise for the portfolios of our federal reserve banks to be filled largely with paper growing out of international transactions. Whatever might have been the advantages in the past, many of them have been lost for the present.

If a genuine discount market is to be developed in this country—one whose activities can be influenced by the federal reserve banks—it must be of a more catholic type. Artificial preferments and discriminations, whose aim seems to have been to give us a ready-made British discount market, ought to be eliminated. Why should not the provisions of the Federal Reserve act be changed so as to empower the federal reserve banks to extend their open market operations to cover notes as well as bills growing out of commercial transactions, since this is a country whose banking needs are after all primarily domestic and whose banking accommodation for domestic purposes is based principally on the note? And why should not the banks also be given the legal right, at discretion, to make loans against stock exchange collateral not only at official rates for members but at market rates for their own account? Presumably, the bulk of the lending against stock exchange securities would be confined to the New York market. Such an extension of open market operations and of rediscounting activities would inevitably be attended with danger, but it is assumed that the power so obtained would be used discreetly, and it would certainly afford the best possible means of bringing about an equalization of the rates on different classes of paper (with due allowance for risk and for the time element). As it is, inequalities of an irrational sort tend to be perpetuated by the existing policy of discriminating in favor of bankers' acceptances and discriminating against loans on stock exchange collateral. The existing prohibitions do not prevent funds being obtained by both classes of borrowers,[7] but they do introduce

[7] *Federal Reserve Bulletin,* Dec., 1919, p. 1107. ". . . experience has demonstrated that the prohibition of direct speculative loans does not of itself act to prevent the indirect use of funds obtained from the system for speculation."

greater uncertainty and wider fluctuations in rates than would otherwise obtain. The result is a considerable and incalculable shifting of loans with a view to profit-taking, which affords the worst possible conditions for building a strong reliable discount market that can be counted upon to absorb offerings at a predicable rate.

To the extent that call loan rates can be brought into reasonable conformity with other rates, with the elimination of all extreme variations, a long step will have been taken in the direction of steadying and enlarging the market for short-term investments. Apologists for the excessively high call loan rates that from time to time prevail in the New York market sometimes allege that only by the imposition of high charges is it possible to prevent the speculative markets from securing an undue share of credit.[8] To this it may be replied that high rates do not necessarily mean restricted demand. The demand for speculative loans in "boom" periods is highly inelastic; the high rates merely indicate that more funds would be taken if they could be got. It cannot be confidently deduced that reductions in the amounts of such loans have occurred. High rates in a period of active speculation may rule for a long time, and attract funds of banks that would otherwise invest in other types of loans. Rediscounts of eligible paper may be made in order to release such funds to the stock market or loans already obtained may not be paid off by banks wishing to utilize the opportunity to secure high rates of interest. Such rates are not always self-correcting and may have a disintegrating influence upon the market for other classes of paper. If the federal reserve banks were in a position to "break" abnormally high rates by direct lending, they would perform a real service at such times. Of course if rates could only be brought down by a too-lavish use of resources, it might be necessary to invoke more drastic methods of control, such as usury laws made applicable to call loans.

[8] A memorandum on the New York call money market, prepared by the Federal Reserve Agent in New York for the information of the Board was published in the Bulletin for April 1920 (pp. 369-372). It presents what seems to the writer to be two irreconcilable points of view, when explaining and tacitly defending high call loans rates. First "call money" is regarded as a surplus available only after the obligations to the customers of the various banks have been satisfied. Then it is stated—and here is a fundamental contradiction—that "It has long been recognized that for assurance of a sufficient amount of money to finance the volume of business in securities, reliance cannot be placed on a rate of interest limited to the rates which obtain or are permitted in commercial transactions whose prior claim on banking accommodations is universally conceded." The suggestion here undeniably is that the call market has to draw funds away from other uses by extraordinarily high bids. How can this idea be reconciled with the notion that call funds are a surplus, large or small, according to customers' demands, and quantitatively speaking, presumably not influenced by rates?

The discussion on the New York call money market published in the Bulletin for April 1920 says (p. 371), that "rates for call money do not determine and have not exerted an important influence on the rates for commercial borrowings." And the belief is expressed that "there is little causal relation between the rates for call money and those on commercial loans." This statement is opposed by a considerable body of testimony to the contrary, for dealers in acceptances and commercial paper brokers insist that their markets expand or contract according to the force of the pull exerted by the demand for stock exchange "call" loans. Bank buyers of commercial paper, it is averred, cut down their purchases when the call rates advance to attractive figures. Similarly dealers in acceptances find their markets narrowing and if they are operating on funds borrowed at call, may find these funds no longer available. Indeed, advances in call loan rates have had as a characteristic accompaniment, increases in acceptances holdings of the reserve banks upon whom dealers have been forced to rely. The fact is one that has become a subject of frequent comment.

If the call loan market were isolated, in point of fact, it would not be a matter for congratulation as supposed. A balanced distribution of loanable funds is best achieved by the interaction of the various pulls for funds, provided no one pull is devastatingly strong. No doubt call rates have at times been so high as to interfere with this adjustment, but the call loan market is not unique in the way in which it was when it offered the banks their chief outlet for excess funds on which they could speedily realize. It was then inevitable that rates should sometimes rise very high as well as fall very low. Under present conditions, it becomes possible and desirable for the banks to adopt an investment policy which will distribute their risks among various types of paper, in the knowledge that they may be realized upon at need.[9]

From all that has been said, the inference is that the call loan rate ought to become more and more "tied to" other market rates. Then, too, as the market for acceptances gradually expands, call funds will be borrowed in increasing amounts by bill dealers. It is very doubtful whether the proposition to make the acceptance market the chief source of demand for call funds, by introducing term settlements on the stock exchange would have the beneficial results that the advocates of the

[9] It is significant in this connection that some commercial paper brokers insist that banks will not buy paper except at a more or less fixed advance over the rediscount rate, asserting that they wish to be in a position to rediscount without loss. As a matter of fact this would not be true in a period of inactive demand, when funds were abundant.

change recite. Settlement days would inject an element of disturbance at frequent intervals whose magnitude could not be foreseen, and the substitution of short term stock exchange collateral time paper for stock exchange call loans would still leave open the question of policy concerning the extent to which the banks should employ their resources in this field. If call loans were to be based primarily on acceptances (assuming so revolutionary a change to be possible) the acceptance market would feel the full force of calls and might well be hurt rather than helped.

Acceptance dealers instead of stock exchange operators would then be hurrying about to find the means to repay called loans and would have as a final recourse the federal reserve banks. This might be in line with the frequently cited English practice but with the difference, often ignored, that the call market which was being so squeezed, would be neither dominant nor secure.[10] In countries in which the discount market is largely dependent upon foreign trade bills, it is logical that the banker's acceptance should predominate. But an imitative structural frame work will not provide materials for a solid edifice so far as this country is concerned. Advocates of the change may see in it a device for encouraging the growth of acceptances by "pouring in" funds that were released from stock exchange use. But this "pouring in" would only follow to the extent that profitable opportunities for investment offered. The acceptance market is quite as likely to be hampered by a lack of good bills as by a shortage of funds.

A further word should be said in support of the proposition that loans against stock exchange collateral be made eligible for rediscount. It does not follow that the scope of collateral lending will thereby be unduly encouraged. "Experience has demonstrated," says the *Federal Reserve Bulletin* for October 1919, "that the prohibition of direct speculative loans does not of itself act to prevent the indirect use of funds obtained from the system for speculation." As a matter of fact since commercial banking is inextricably bound up with investment and related speculative activities, and since it follows that any form of rediscount furthers any type of member bank investment activity, there is argument for permitting the reserve authorities to make loans against securities. These loans might be made at a rate expressing a difference in the desirability of the paper from the point of view of liquidity. Variations in the rate would have a selective influence and enable the banks to keep their portfolios from becoming too one-sided. If this did not serve, the banks could in their judgment re-

10 Rovensky, *The Acceptance as the Basis of the American Discount Market.* "In every commercial country in the world, the discount market is based upon the bank acceptance and the discount market in turn is the basis of the entire money market."

fuse to make further loans if successive rate advances did not discourage them.

There seems no reason why the member banks should not have the right to obtain loans against readily marketable collateral, just because the proceeds may be used to further investment or related speculative activities. Whatever form rediscounts may take, their proceeds are used to support a conglomerate mass of obligations assumed by member banks, which may grow either out of investment activities or result from commercial loans. As Moulton says,[11] "It will be recalled from our previous analysis of the relation of the commercial banking system to the financing of stock exchange speculation, to the outright purchase of securities, to the making of collateral loans for fixed capital purposes and to the activities of investment bankers engaged in the marketing of securities, that the funds of the commercial banking system constitute the support for the entire financial fabric, investment and speculative, as well as commercial." The chief concern therefore of the rediscounting agency cannot be to keep remote from all investment activities. It cannot do that even if it refuses to accept anything but the most unimpeachable commercial bills of exchange. What it does want to do is to prevent if possible any radical shifting of bank credit which alters the proportional amount of accommodation available to the different groups dependent upon the commercial banking system.

Only when increases in loans obtained for investment purposes, or increases in direct purchases of securities (which are in essence the same) outstrip the accommodation given the commercial borrower, is there danger of a break-down of the delicately poised economic structure. A disproportionate expansion of investment credit increases the demand for goods already adapted to the uses for which they were intended; and on the other hand, it reduces, at least relatively, the purchasing power of those engaged in the rapid transformation and transference of goods. Hence it upsets calculations as to the direction purchasing power will take, changes the values of goods, and jeopardizes the repayment of many loans. To cut off or reduce the investment demand as compared with the commercial demand has equally serious consequences. If people cannot obtain purchasing power to use for buying all the various commodities needed in furthering the process of production, neither can those persons who had hoped to sell such commodities after a brief period of holding, get rid of them. Their ability to repay through transfer is destroyed. As a matter of fact, the present failure of investment demand has been responsible for converting

[11] *Cf. Financial Organization,* p. 633.

many so-called quick loans into slow assets. Moreover, as the investment demand is the demand which pays for the services of a vast body of producer-consumers, lack of such demand has an incalculable effect upon the "liquidity" of all sorts of commercial loans based upon consumers' goods at various stages of production.

It is useless to set up an ideal type of bank loan and by legislation or through pressure exerted by rediscounting agencies try to exclude other types from the portfolios of member banks. If it could be done, it would be disastrous and the "ideal" type of commercial bank loan of which samples can now be found, would, in that event, cease to exist, as the market for "liquid" commercial assets would be largely destroyed by the blow dealt to investment purchasing power. What is needed—and the task is hard and failure comes periodically—is to attempt to maintain a balance among the various types of lending activity to the end that the purchasing power of the community may not be sharply diverted in new directions or be spent in disproportionate amounts in familiar ways.

To sum up: it is not believed that the discount rates of the federal reserve banks have so far been used effectively as a means of credit control. If they are to function successfully in the future in this respect, it will be necessary not only to keep the official rates above the market rates in the chief money centers, but it will also be essential to bring the market rates under better control with a view to the elimination of extreme and erratic fluctuations, such as have been especially pronounced in the call market. To this end, it is proposed that the open market operations and the rediscounting activities of the federal reserve banks be expanded in an attempt to develop a discount market, or rather discount markets, which will not be based chiefly upon acceptances—discount markets, moreover, in which the rates on various classes of paper will maintain a stable and fairly predicable relation to one another.

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